Seasonal Notes on the Rhopalocera.

By S. G. CASTLE-RUSSELL, F.E.S.

So far as my own experience goes the season has been an exceptionally bad one, one of the very worst that I remember during the last 30 years. The summer has been cold, windy, and sunless, and following upon two very similar ones has no doubt had a very deleterious effect upon insect-life generally, even the wasps being conspicuous by their absence. The want of sunshine prevented the butterflies from moving about and exercising their usual functions of reproduction. I particularly noticed, about August the 20th, a large number of freshly emerged female *Polyommatus* (*Agriades*) *coridon* and within three days, owing to the wet and very cold winds, they had practically all disappeared, there being no opportunity for ovipositing. This surely must affect the numbers of next year. I have found in this district every species scarce, with the exception of *Cupido minimus*, which was abundant. *P.* (*A.*) *coridon* which was abundant everywhere around here four years ago, has been very scarce, and in some spots has hardly appeared at all. The Argynnids, also generally abundant, have been in dozens where they usually appear in hundreds.

In the New Forest *Dryas paphia* has been scarcer than I have ever seen it, and during the whole month of July only one good aberration was seen, but not taken. *Argynnis aglaia* and *A. cydippe* (*adippe*) were seen but rarely. *Aphantopus hyperantus* was in fair numbers and some nice aberrations were secured. My wife saw a beautiful silvery grey female *Epinephile jurtina* sitting on a bramble-bush, but made an unsuccessful effort to catch it, owing to the suspected presence of an adder in the near vicinity. At the end of the season the Vanessas were abundant and I heard of two remarkable aberrations being seen in gardens in this district, but not taken as no net was available.

My wife and I expended a very considerable time in field work entailing much hard walking, and during the season we were fortunate enough to capture the undermentioned aberrations which, together with many others of a minor character, constitute a very satisfactory addition to our cabinets.

Brenthis euphrosyne.—Basingstoke. A male with the hindwings on the upperside of a light straw colour.

Argynnis cydippe (*adippe*).—New Forest. A male with the greater part of the wings on the upperside of a straw colour.

Argynnis aglaia.—Andover District. A silvery white male. This insect was seen one day and caught during a visit to the same down three days after. When first observed in flight it greatly resembled *Boarmia roboraria*.

Aphantopus hyperantus.—New Forest. 1. A male with large symmetrical buff coloured splashes on outer portions of each underside wing: this is a very unusual form.

2. A remarkably fine male form of ab. *lanceolata*; the large pear-shaped spot with a long white dash in the centre of the hind wing, which usually has a small spot connected to it above, has an additional spot beneath, there being a combination of three, instead of the usual two spots

Epinephile tithonus.—Andover District. 1. A male with one upper wing of white coloration.

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2. A female with two upper wings white except portions of the inner margins.

Polyommatus icarus—Andover District. 1. A gynandromorphous specimen with the left upper wing entirely of male colour, the remaining three wings being of female colour (brown) with dashes of male colour on each.

2. A male so heavily dusted with black as to give the appearance of dark blue.

Polyommatus (*Agriades*) *coridon*.—Andover District. A number of males of a greenish colour, heavily dusted with black.

Two males and two females ab. *fowleri* all well-defined forms.

A female with underside upper wing striated.

A female with underside lower wing striated.

A female with the wings one side normal: on the other side the upper wing is striated and the lower wing *obsoleta*-form with white ground.

In addition to the above described captured forms we were fortunate enough to breed several very striking forms of *Melitaea aurinia*.

Melitaea aurinia.—Hampshire. 1. Female. On the upper wings the usual fulvous colour is very heavily suffused with black, the hind-wings being almost entirely black with series of elongated straw-coloured spots. The underside is entirely spotless, the wings being of a light fulvous: on the lower wings is a broad white border occupying about half the area of the wings. This specimen is very similar to one I bred last year, which was described by Mr. Frohawk in the *Entomologist* of May, 1923. The underside of this latter specimen instead of being spotless was heavily striated with black.

2. Female. The upperside of this is somewhat similar to the one above described, but with less black suffusion, and the underside is of more normal type, with the exception that on the upper wings there are four large black spots on each, in addition to the usual spotting.

3. Female. This is a difficult insect for a non-technical person to describe properly. On the upper wings the general ground-colour is of a light rosy tint with long rays of a greyish white colour. The hind-wings are nearly entirely black with 12 long pinkish grey streaks. On the underside the upper wings are fulvous with the outer margins of a rosy hue, the lower wings have a wide white border occupying the greater part of the wing. The underside is entirely spotless. This insect has a singularly beautiful appearance.

4. Male. The upper side of all the wings are fairly normal except that there is an entire absence of yellow colouring. All the wings have a wide entirely black border, without spotting.

All these specimens were bred under normal conditions in an unheated green-house in the garden and which, owing to the absence of sunshine at the time, did not greatly exceed the normal temperature. All the imagines emerged in mid-May, about a week before the butterfly was on the wing in a wild state. I have bred this species for several years past but my experience has been that striking aberrations are very rare, and this seems borne out by the fact that no really extreme aberrations were included in the recent sales of famous collections.

Aglais urticae. A late brood of larvae was taken on September 7th, and produced a number of unusually dark types, the best being several

ab. *bolandii* on which the blue marginal spots are very large and extremely bright.

It may be of interest to note that on Tuesday last a number of very remarkable named forms of aberrations of the Vanessas were sold at Steven's Auction Rooms.

Forms of *Euvanessa antiopa*, *Eugonia polychloros*, *Pyrameis atalanta* and *Aglais urticae*, varying beyond one's wildest imagination were included. These specimens were of Continental origin, and the result of submission to extremes of temperature.

It was interesting to note that the well-known collectors present fought shy of the insects, and they realised only a matter of a few shillings each, an unsatisfactory reward for the labour entailed. One collector was heard to remark that probably in a few years time some of these specimens would be found re-pinned and re-set in British collections *improperly* labelled. I sincerely trust not: anyhow they will be easily recognised for what they are I think. [Some of these were bought for a collection of Palaearctic Rhopalocera.—H.J.T.]

The Variation in Larentia (Thera) variata, Schiff.

By CARL HÖFER of Klosterneuburg (Vienna).

(Translated by Hy. J. TURNER, F.E.S.)

(*Concluded from p. 154.*)

NOTE.—In the foregoing portions of the article, by the name "pine" is meant *Abies* (*Picea*) *excelsa* (Föhren) Spruce, and by "fir" is intended *Pinus sylvestris*, scots' pine, Fichten.—HY.J.T.

To this I must add the following notes from my own experiences.

1. The assertion is not true that an intermediate form is never found—at least among the imagines in our neighbourhood (Vienna)—between *variata* and *obeliscata*. In my own collection there are two males of *variata* identical in their coloration with the *obeliscata* of Herrich-Schäffer's figures. I have a similarly large and similarly coloured example of *obeliscata*, placed with them to show that on the other hand the insect affords quite a different impression.

2. That the food plant has no effect upon the colour, the insignificant results obtained by my colleague Preissecker and myself in breeding from the egg have established. I have five *variata* of both sexes which were reared from the eggs of a normally coloured and normally marked *variata* female, and fed exclusively on *Pinus sylvestris* (Föhren). These examples show very evidently not the slightest trace of an approach to *obeliscata*. Further, I have a female of *obeliscata*, which was bred from an egg laid by a female caught on the Buchberg, near Klosterneuburg, exactly agreeing with the figure of Herrich-Schäffer. The larva was exclusively fed on *Abies excelsa* (Fichten), but there was no indication of the appearance of an *obeliscata* origin.

It is of no good to introduce into this question a parallel between *Ellopia fasciaria* and *obeliscata*. In woods of *Pinus sylvestris* (Föhren) the brown form *Ellopia fasciaria* is found flying together with its green form *prasinaria*, and these *prasinaria*, which fed on *P. sylvestris* of course, are as deep green as the true *prasinaria* found in woods of *Abies excelsa* (Fichten), where only the form *prasinaria* is found.